

CLAIMS

1. An ancillary unit drive adapter for use in an engine
5 block which has at one end a lateral flange formed with
an aperture for mounting of the ancillary unit, the drive
adapter comprising a casing for mounting on the end face
of the engine to overlie the aperture, a shaft journalled
in the casing, a formation at one end of the shaft to
10 enable the shaft to be coupled to the input shaft of the
ancillary unit and a cog solid with the opposite end of
the shaft for meshing with an engine driven gear, and
characterised in that faces on the opposite sides of the
cog serve in use as bearing surfaces to withstand axial
15 forces acting in both directions on the drive shaft.

2. A drive adapter according to claim 1, characterized
in that the part of the drive shaft engaged by the cog
20 has the same diameter as the part journalled in the
casing.

3. A drive adapter according to claim 2, characterized
25 in that the drive shaft is formed as a hollow shaft.

4. A drive adapter according to claim 3, characterized
in that an internally splined coupling is formed by
30 broaching one end of the shaft.

5. A drive adapter according to claim 4, characterized
in that a drainage hole is provided to permit oil
35 collecting in the hollow shaft to drain away in use into
the housing of the engine flywheel.

6. A drive adapter according to claim 5, characterized in that the drive shaft is eccentrically mounted within
5 the casing.

7. An engine fitted with an adapter according to preceding claim 1, further comprising a cover encasing
10 the end face of the engine, which cover is formed with a raised ridge for contacting the bearing surface on the cog to limit axial displacement of the drive shaft.

15 8. An engine according to claim 7, characterized in that the ridge is crescent shaped and has an upward facing opening so as to act as a collector for oil draining down the cover, the collected oil serving to lubricate the bearing surfaces between the cog and the
20 ridge.